

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Saint Gobain Igniter Products

New Hampshire Manufacturing Extension Partnership

Lean Lights the Way for Saint-Gobain Advanced Ceramics Igniter Products

Client Profile:

Saint-Gobain, founded in 1665 and headquartered in France, is the world's largest manufacturer and distributor of building materials, and a leader in the production of high-performance materials and glass containers. Saint-Gobain Advanced Ceramics Igniter Products (formerly Norton Igniter Products) has been producing hot surface ignition (HSI) systems for over three decades. These systems are primarily used to ignite gas appliances such as dryers, ovens, furnaces and various, other gas-fired equipment. Currently, there are 152 people working in the two manufacturing facilities located in Milford, New Hampshire.

Situation:

Saint-Gobain Corporation invited employee guests from their other facilities to come to the Worcester, Massachusetts location to participate in a presentation by a large, international consulting company. Saint-Gobain plants were then asked to invite the consultants to their respective facilities to see how they could provide assistance. The consultants led the New Hampshire group through a few Kaizen events that were very helpful. "They are a high powered group of experienced consultants, but their costs were prohibitive for us," said Rich Hillman, Health, Safety, Environmental and World Class Manufacturing Programs Manager at the Milford location. "We were trying to obtain grant funding from the state of New Hampshire to defray some of the cost and during the process of looking for grant opportunities we learned about the New Hampshire Manufacturing Extension Partnership (NH MEP), a NIST MEP network affiliate. The grant application was re-written with NH MEP as training provider, and the company was successful in obtaining funding toward their Lean training. "NH MEP's David Hess became our project manager and worked to keep us focused and helped us learn the processes so we could implement the programs on our own later," said Hillman.

Solution:

NH MEP provided basic Lean awareness training for Saint-Gobain employees so that everyone had knowledge of what Saint-Gobain was undertaking. They learned about Lean terms and tools and how they are applied, during classes which included hands-on job-shop simulations. A group of twelve employees from various areas of the plant attended a Value Stream Mapping (VSM) event on the pre-assembly process. During the event, the process flow was diagrammed from start to finish and areas of waste were identified and later addressed during subsequent Kaizen events. During a Kaizen, the problem areas are 'taken apart and put back together in a better way' to eliminate the waste and bring the process closer to the optimal future state. One Kaizen event done in pre-assembly is referred to as the 'Green Machining Cell Event.' In the Current State there were four machines situated in various locations on the shop floor. Each machine was operating like an island with its own dedicated inventory and operator. Every product coming through this area had to have work done to it on at least three of these machines. Operators would have to walk around the shop floor moving product from machine to machine to be worked on. By reconfiguring the machines into a circle and creating a cell,

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the product can now be passed from one machine work station to the next utilizing one operator who only has to walk a few steps within the cell to accomplish the next task. The need for inventory and a dedicated operator at each machine was eliminated. As a result of NH MEP's assistance, no jobs were lost due to the cellular layout, rather, some machine operators were cross trained to assist with processes in assembly to alleviate the need to hire temporary help. Hillman said, "This is the first time in the eight years I have been with the company that we have not had to hire any temporary help during our busy summer season. Now we are able to do more with less."

Results:

- * Cost avoidance of \$73,000 for temporary labor.
- * Reduced travel time on shop floor by 41 percent.
- * Opened up 1500 square feet of floor space.

Testimonial:

"The best thing about our training with NH MEP was that most of our employees had no idea what Lean was all about. This process gave everyone Lean awareness and opened their eyes to possibilities and what it could mean for our company. Many great ideas have come from the employees that have given Saint-Gobain the opportunity to reduce costs. We were also pleased to be able to use a local state resource."

Richard Hillman, Manager of Health, Safety, Environmental and World Class Manufacturing Programs